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REMARKS

Claims 11-14 and 16 and new claims 19-23 are in the case and presented for reconsideration.

Claims 1-10, 15, 17 and 18 have been cancelled without prejudice. Claims 2, 3, and 7-10 were the subject of an earlier requirement for restriction and withdrawn as directed to a non-elected invention. Applicants have cancelled these claims but reserve the right to prosecute the subject matter of these claims in a continuing application.

Claims 11-18 were added to the application in the response mailed May 21, 2003 but appear to have been overlooked in preparing the final office action mailed July 31, 2003. These claims have been amended in this response and accordingly, Applicants respectfully request examination of these claims.

Claims 11-14 and 16 have been amended to clarify the claimed invention. As noted in the response mailed May 21, 2003 in which claims 11-18 were first presented, support for these claims is found on page 7 of the specification. Support for claims 12 and 13 is found on page 8 of the specification. Support for claim 14 is found on page 30 of the specification.

Support for new claim 19 is found on page 8, lines 24-25 and page 9, lines 1-3. Support for new claim 20 is found on page 12, lines 19-20. Support for new claims 21-23 is found on page 12, lines 21-22.

Rejections under 35 U.S.C. § 102

Claims 1, 4-6 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Daughenbaugh et al. (U.S. 5,502,140). Applicant submits that the cancellation of these claims renders the rejection moot.

Applicants' presently claimed invention is a resin composition comprising the copolymerization reaction product of a monomer mixture comprising: (1) about 5% to about 25% by weight a compound of the formula I and (2) about 75% to about 95% by weight of a cyclic diolefin component comprising at least about 50% by weight dicyclopentadiene, wherein the reaction product i.e., the resin, has a M_z of less than about 2,000. The resin is made by the process having the steps of (i) providing a

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solvent to a reactor; (ii) heating the solvent to a temperature of about 200°C to about 265° C; and (iii) adding the monomer mixture at a rate such that the concentration of free monomer compound of formula I in the reaction medium is held at a minimum at any given time of the reaction to minimize the formation of monomer compound homopolymer.

Applicant submits that the presently claimed invention is not anticipated by Daughenbaugh et al. (U.S. 5,502,140).

Daughenbaugh et al. discloses a thermally copolymerized hydrocarbon resin consisting essentially of from 40% to 90% by weight of a cyclic diolefin component comprising at least about 50% by weight dicyclopentadiene and from 10% to 60% of a vinyl aromatic compound having the formula:

$$\begin{array}{c|c} R_2 \\ | \\ C = CH_2 \end{array}$$

where R_1 is hydrogen or a C_{1-10} linear or branched alkyl group at the meta or para position and R_2 is a C_{1-10} linear or branched alkyl group or a 2-methyl-2-phenylpropyl group. Preferred vinyl aromatic compounds include α -methylstyrene; para-methyl- α -methylstyrene; 2,4-diphenyl-4-methyl-1-pentene and mixtures thereof. In preparing the resins, Daughenbaugh et al. teach adding all of the reactants into the autoclave reactor at the beginning. Thus, Daughenbaugh et al. does not teach or suggest a resin composition made by the presently claimed process.

The examiner maintains that Daughenbaugh et al. teaches a range for vinyl aromatic monomers going down to 10%. Applicants submit that the examiner is misapplying Daughenbaugh et al. Although, Daughenbaugh et al. teach copolymerizing dicyclopentadiene with a vinyl aromatic monomer, Daughenbaugh et al. clearly teach that the vinyl aromatic monomer is not the same compound as is presently claimed by Applicants. Referring to Comparative Example 2, (Column 7, lines 1-25 of the '140

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patent) Daughenbaugh et al. states that styrene is a vinyl aromatic monomer not within the scope of their invention.

Applicants further respectfully submit that one skilled in the art would not be motivated to modify the teachings of Daughenbaugh et al. to make a copolymerized resin by the claimed process of (i) providing a solvent to a reactor; (ii) heating said solvent to a temperature of about 200°C to about 265°C; and (iii) adding a monomer mixture at a rate such that the concentration of free monomer compound of formula I in the reactor is held at a minimum at any given time of the reaction to minimize the formation of monomer compound homopolymer. As discussed above, Daughenbaugh et al. disclose adding all the materials in the autoclave reactor at the same time and heating the materials together and does not teach or suggest to first heat the solvent to a temperature of about 200°C to about 265°C before adding the monomer mixture to the reactor at a rate such that the concentration of free monomer compound of formula I in the reactor is held at a minimum at any given time of the reaction to minimize the formation of monomer compound homopolymer.

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Accordingly, Applicants submit that claims 11-14, 16, and 19-23 are not nticipated by Daughenbaugh et al. (U.S. 5,502,140) and request that the 35 U.S.C. §102(b) rejection be withdrawn. Applicants submit that claims 11-14, 16, and 19-23 are now in condition for allowance and respectfully request the examiner pass the application to allowance at his earliest convenience.

Respectfully submitted,

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CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

I hereby certify that this paper (along with any paper(s) referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, MA 22313-1450.

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